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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/577,922	05/24/2000	Toru Mineyama	09812.0181	4471

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EXAMINER	
HOYE, MICHAEL W	
ART UNIT	**PAPER NUMBER**
2614	

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/577,922	MINEYAMA, TORU	
	Examiner	Art Unit	
	Michael W. Hoye	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 June 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-7,10 and 11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-7,10 and 11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on June 27, 2005 and entered with the RCE filed on June 29, 2005, have been fully considered but they are not persuasive.

Regarding independent claim 11, the Applicant argues that, "nothing has been found in Herz that would teach or suggest preventing overlapping of the programs as a function of a consecutive channel changing number and a total virtual channel number, as recited in claim 11."

In response, the Examiner respectfully disagrees with the applicant because the Herz reference clearly teaches the claimed, "...wherein said selecting means prevents overlapping of the programs as a function of a consecutive channel changing number and a total virtual channel number," as met by col. 22, lines 49-55, wherein as part of the selecting means, scheduling constraints are imposed which prevent overlapping time windows, that may have even been defined by the user, and only one of the programs or windows in the conflicting set can be used in the final assignment of creating the virtual channels. Also, for additional description on the "virtual channel" creation see col. 23, lines 1-15; col. 45, line 34 – col. 46, line 18; col. 46, lines 43-61; col. 47, lines 37-45; col. 48, line 48 – col. 49, line 1 and lines 19-23, where in col. 23, specifically lines 5-7, the "virtual channels" may be displayed on dedicated channels in the electronic program guide (EPG) (lines 1-5), and the channels may be reprioritized for presentation on the EPG on the basis of calculated "virtual channels" (lines 5-7), where the highest priority program would be arranged prior to the other programs based on the calculations determined from the "agreement matrix" (lines 10-14). In addition to, a user or customer may

manually modify his or her customer profiles (see the sections cited above for cols. 45-46) including the weights or values of certain characteristics and a program list (see col. 46, lines 6-16). Furthermore, in col. 48, line 48 – col. 49, line 1, each customer may have one or more of his/her own "customized" virtual channels showing his or her own requests for movies, times, or shows. The customized customer profiles are used to create the one or more virtual channels, which may be prioritized for presentation on the EPG as described above.

Regarding dependent claim 5, the Hodge et al reference is used in combination with Herz to provide additional teachings as described in the rejection below.

Regarding dependent claims 2-4, 6-7 and 10, the claims are dependent upon independent claim 11, and are rejected based on the arguments made for claim 11 above and on their respective rejections as described below.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 2-4, 6, 7 and 10-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Herz et al (USPN 5,758,257), cited by the examiner.

As to claim 11, note the Herz et al reference which discloses a receiver that receives broadcasts and program information. The Herz et al reference, hereafter referred to as Herz, discloses the claimed "receiving means for receiving a digital broadcast signal" as met by set top

multimedia terminal 620 (Fig. 10), which may receive digital broadcast signals (also see col. 25, line 4 – digital transmission). The claimed "selecting means for enabling a user to manually select real channel information corresponding to a number of programs from information of a plurality of real channels" is met by the set top multimedia terminal 620, including remote control 1008, microprocessor 1006 and tuner 1002 (see Fig. 10, also see Fig. 9, user 916, processor 906 and channel selector 912, and col. 45, line 34 – col. 46, line 18, which will be described in more detail below). The claimed "program information extracting means..." is met by data receiver 1004 in Fig. 10 (also see Fig. 9, available/authorized program list 902), where the data receiver extracts the program information from the plurality of real channels in the digital broadcast signal and sends the program information to microprocessor 1005 (or processor 906 in Fig. 9). The claimed "user profile creating means..." is met by the microprocessor 1006 and memory 1012 in Fig. 10 (and/or agreement matrix 906, time of day/mood indicator 910, and processor 906 in Fig. 9), where a user profile may be established by the viewer entering various conditions (col. 4, line 18 – col. 5, line 18 and col. 46, lines 43-61), in addition, a "user profile" may be developed from the program information that has been stored from the user's viewing history/habits or programs actually watched by the user (col. 6, lines 35-59 and col. 46, lines 43-61, also see col. 40, line 32 – col. 41, line 14). The claimed "...user profile in which program information are accumulated as user profile information" is met by the user's viewing history/habits, which inherently accumulates program information at every time unit (also see col. 22, lines 22-23 – referring to time slots). The claimed "virtual channel guide creating means for creating a virtual channel guide..." is met by processor 906 in Fig. 9 (see col. 45, lines 34-55) and/or microprocessor 1006 in Fig 10 (see col. 46, lines 43-59), which creates a designated

number of "virtual" channels for the customer's consideration at any given time based on the agreement matrix or viewing history/habits or "user profile" and where the processor 906 (Fig. 9 and col. 45, lines 34-49) takes the agreement matrix that was determined and stored in memory 908, and modifies the electronic program or display guide 914 to include fields for the "virtual" channels, then the customer may select a desired virtual channel from a listing of the programs available on the virtual channels using the customer's remote control unit, whereby the programs are presented to the user on the customer's television screen. The claimed "...in which programs are located by utilizing said user profile" is met by acceptable ranges or by ratings with a scale of 10 in which 10 means the greatest satisfaction (see col. 12, lines 14-25), and by the processor as described above, which selects the programs by referring to the stored customer profiles including the characteristics and weighted values (col. 45, lines 34-55, also see col. 4, lines 53-58 and col. 46, lines 50-54). The claimed, "...wherein said selecting means prevents overlapping of the programs as a function of a consecutive channel changing number and a total virtual channel number," as met by col. 22, lines 49-55, wherein as part of the selecting means, scheduling constraints are imposed which prevent overlapping time windows, that may have even been defined by the user, and only one of the programs or windows in the conflicting set can be used in the final assignment of creating the virtual channels. Also, for additional description on the "virtual channel" creation see col. 23, lines 1-15; col. 45, line 34 – col. 46, line 18; col. 46, lines 43-61; col. 47, lines 37-45; col. 48, line 48 – col. 49, line 1 and lines 19-23, where in col. 23, specifically lines 5-7, the "virtual channels" may be displayed on dedicated channels in the electronic program guide (EPG) (lines 1-5), and the channels may be reprioritized for presentation on the EPG on the basis of calculated "virtual channels" (lines 5-7), where the

highest priority program would be arranged prior to the other programs based on the calculations determined from the "agreement matrix" (lines 10-14). In addition to, a user or customer may manually modify his or her customer profiles (see the sections cited above for cols. 45-46) including the weights or values of certain characteristics and a program list (see col. 46, lines 6-16). Furthermore, in col. 48, line 48 – col. 49, line 1, each customer may have one or more of his/her own "customized" virtual channels showing his or her own requests for movies, times, or shows. The customized customer profiles are used to create the one or more virtual channels, which may be prioritized for presentation on the EPG as described above.

As to claim 2, the claimed display means for displaying said virtual channel guide created by said virtual channel guide creating means is met by the TV as disclosed in Figs. 9 and 10 and a program guide that displays the "virtual" channel information which may be selected by the user is sent to the TV (col. 45, lines 36-55 and col. 46, lines 54-61).

As to claim 3, the claimed time zone setting means for setting a time zone in which said virtual channel is created is met by the time of day settings received from the head end or as input by the customer and stored in memory (see col. 45, lines 24-30 and col. 45, line 56 – col. 46, line 2).

As to claim 4, the claimed said user profile creating means creates a user profile of every predetermined period and constantly holds user profiles of a constant number is met by a constant which can vary in accordance with the desired accuracy for the profiles (see col. 6, lines 56-59 and col. 7, lines 6-35).

As to claim 6, the claimed said user profile accumulates at least a title is met by the content profiles with the various program titles as shown in col. 21, lines 1-29, the claimed

accumulating a category is met by col. 4, lines 59-67, and the claimed accumulating a key word is met by col. 13, lines 10-11.

As to claim 7, the claimed virtual channel guide creating means uses user profiles located ahead of and behind said predetermined unit time if user profile information corresponding to said predetermined unit time is not accumulated then when a program of said real channel corresponding to a predetermined unit time is selected is met by the inherency of the customer profiles that are created and updated in the set top multimedia terminal of Herz. In the Herz reference, if a customer profile has not been determined for a particular time of day, the customer profile may be developed using other relevance feedback techniques, such as initial customer preference profiles, other programs viewed in accordance with time of day, time of the week, and/or customer mood, and various other characteristics may be used as well from the customer's preferences for viewing programs and viewing history (see col. 4, lines 22 – col. 5, line 13, col. 25, line 65 – col. 26, line 8, and col. 26, lines 40-57).

As to claim 10, the claimed channel control means for controlling said selecting means in a manner that said real channel selected from said virtual channel guide created by said virtual channel guide creating means are received sequentially is met by the set top terminal creating a electronic program or display guide with "virtual channels" which if selected by the user will display the most preferred video program on the user's television during the current time frame, after the program has completed the virtual channel will remain on the same channel or tune to a different channel based on the best match to the customer's profile, so the programs are received sequentially on the "virtual channel" and preferably the viewer will not have to change channels

or "channel surf" at all or very frequently since the programs are received sequentially (see col. 3, lines 3-16, col. 4, lines 41-43 and 53-58, and col. 45, lines 34-49).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Herz et al (5,758,257), in view of Hodge et al (USPN 6,564,381), both cited by the examiner.

As to claim 5, the Herz et al reference discloses a receiver wherein said user profile creating means crates a weekday user profile from a viewing history of programs viewed on weekdays or "time of the week" (see col. 4, lines 53-63, col. 5, lines 23-33, and col. 45, lines 24-27). The Herz et al reference does not explicitly disclose creating a holiday user profile from a viewing history of programs viewed on holidays. The Hodge et al reference discloses the use of holiday profiles (see col. 7, line 1 – col. 8, line 6 and col. 9, lines 22-24). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the receiver that creates a weekday user profile as disclosed by Herz et al with the holiday user profile as taught by Hodge et al. One of ordinary skill in the art would have been led to make such a modification since the additional use of a holiday user profile for creating "virtual" channels would be beneficial for users who are likely to view specific programs or movies that occur on holidays.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael W. Hoye whose telephone number is **571-272-7346**. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller, can be reached at **571-272-7353**.

Any response to this action should be mailed to:

Please address mail to be delivered by the United States Postal Service (USPS) as follows:

Mail Stop _____
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P.O. Box 1450
Alexandria, VA 22313-1450

Effective January 14, 2005, except correspondence for Maintenance Fee payments, Deposit Account Replenishments (see 1.25(c)(4)), and Licensing and Review (see 37 CFR 5.1(c) and 5.2(c)), please address correspondence to be delivered by other delivery services (Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolater, etc.) as follows:

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Hand-delivered responses should be brought to the Customer Service Window at the address listed above.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is **571-272-2600**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see **http://pair-direct.uspto.gov**. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).

Michael W. Hoye
September 15, 2005

Jason Salce
Art Unit 2611

Jason Salce
9-15-05